

What is claimed is:

1. An adjusting device (10) for motorized movement of a safety belt (12) in a motor vehicle, having a transmission (22) that is contained in a transmission housing (20) and is equipped with a drive pinion (52); the drive pinion (52) meshes with a toothed rack (26), which is able to slide in the longitudinal direction (64) through a guide element (28) of the adjusting device (10),
wherein the transmission housing (20) has a through bore (82) through which a bolt (80) affixed to the vehicle body is able to pass in order to fasten the adjusting device (10) in place.
2. The adjusting device (10) as recited in claim 1,
wherein the through bore (82) passes axially through the drive pinion (52).
3. The adjusting device (10) as recited in one of claims 1 or 2,
wherein the drive pinion (52) is embodied as integrally joined to an axially offset worm gear (50) through which the through bore (82) likewise passes axially.
4. The adjusting device (10) as recited in one of the preceding claims,
wherein the drive pinion (52) and the worm gear (50) are supported radially in the transmission housing (20) by means of at least one outer circumference surface (90).
5. The adjusting device (10) as recited in one of the preceding claims,
wherein the transmission housing (20) has at least two axial stop surfaces (87, 88) that support the drive pinion (52) and the worm gear (50) axially.
6. The adjusting device (10) as recited in one of the preceding claims,

wherein the transmission housing (20) has a base body (56) and a transmission cover (58) that are attachable to each other and are manufactured out of plastic – in particular by means of the injection molding process.

5 7. The adjusting device (10) as recited in one of the preceding claims, wherein the guide element (28) is an integral component of the transmission housing (20).

8. The adjusting device (10) as recited in one of the preceding claims,
10 wherein the worm gear (50) is operationally connected via a worm shaft (48, 46) to an electric motor (18) that is connected to the transmission housing (20).

9. A fastening device (11) for a belt hand-over,
wherein a bolt (80) affixed to the vehicle body passes through a through bore
15 (82) that is provided in a transmission housing (20) of an adjusting device (10) – in particular as recited in one of claims 1 through 8.

10. The fastening device (11) as recited in claim 9,
wherein the transmission housing (20) is supported in rotary fashion on the bolt
20 (80) affixed to the vehicle body.

11. The fastening device (11) as recited in one of claims 9 or 10,
wherein after the adjusting device (10) is mounted on the bolt (80) affixed to the vehicle body, the adjusting device (10) is axially fixed by means of a retaining
25 element (84) – in particular by means of a threaded nut (84) that is placed onto a thread of the bolt (80) affixed to the vehicle body.

12. The fastening device (11) as recited in one of claims 9 through 11,
wherein in order to align the angular position of the adjusting device (10), the
30 adjusting device has a contact surface (92) that cooperates with a corresponding

counterpart contact surface (93) that is fixed in relation to the vehicle body and in particular, is situated on another pin (86) affixed to the vehicle body.

13. A method for attaching an adjusting device (10) for motorized movement
5 of a safety belt (12) in a motor vehicle, in particular as recited in one of claims 1 through 8, in which the adjusting device (10) has a transmission (22) with a transmission housing (20),
wherein first, a bolt (80) is attached to a vehicle body (1) of the motor vehicle, then the adjusting device (10), which is equipped with a through bore (82) that passes
10 through the transmission (22) and the transmission housing (20), is slid onto the bolt (80), and then the adjusting device (10) is axially fixed to the bolt with a retaining element (84).